MetaData Description

I. IDENTIFICATION TAB

A. CITATION PAGE

FIELD	FIELD CONTENT
* CATEGORY	Wet and Dry Deposition
* PUBLICATION DATE	February 9, 2010
*TITLE	Space-time Predictions of Deposition
URL	
* NATIVE DATASET ENVIRONMENT	Annual Predictive output files (.csv) include the following variables: Longitude, Latitude, Predictions, Predictive standard error

B. DESCRIPTION PAGE

FIELD	FIELD CONTENT
* ABSTRACT	A space-time Bayesian fusion model (Sahu, S., Gelfand, A., and Holland, D. M. (2010. Applied Statistics **59**, Part 1, 1-30) is used to provide annual predictions of wet sulfate and nitrate deposition (kg/ha) for 2001, by aggregating up from weekly predictive fields. We plan to add surfaces for additional years soon. The fusion model uses NADP/NTN weekly wet deposition observations and numerical output from the Models-3/Community Multiscale Air Quality (CMAQ).
* PURPOSE	The predictive surfaces are intended for use by statisticians and environmental scientists interested in the spatial distribution of wet deposition for ecological assessments.
SUPPLEMENTAL INFORMATION	
* PROGRESS	Complete
* UPDATE FREQ.	As needed

C. TIME & DATE PAGE

FIELD	FIELD CONTENT
* CURRENTNESS	Februaru 18, 2009
* DATE TYPE	Range
* SINGLE DATE	
* MULTIPLE DATES	
Date 1	

Date 2	
Date 3	
* RANGE OF DATES	FROM: January 1, 2001 TO: December 31, 2001

D. GEOGRAPHIC AREA PAGE

2001 FIELD	FIELD CONTENT
* minimum longitude	-95
* maximum longitude	-67
* minimum latitude	27
* maximum latitude	49

E. KEYWORDS PAGE

FIELD	FIELD CONTENT
* THEME	ISO
* THEME KEYWORDS	Environment
THEME 2	EPA
THEME 2 KEYWORDS	Air
THEME 3	
THEME 3 KEYWORDS	
* PLACES	Eastern United States
* PLACES KEYWORDS	
PLACES 2	
PLACES 2 KEYWORDS	
PLACES 3	
PLACES 3 KEYWORDS	

F. SECURITY PAGE

FIELD	FIELD CONTENT
* SECURITY CLASSIFICATION SYSTEM	EPA classification system
* CLASSIFICATION	Medium Confidentiality
* SECURITY HANDLING DESCRIPTION	May be shared within the scientific community
* ACCESS CONSTRAINTS	Access for specific applications within use constraints

FIELD	FIELD CONTENT
* USE CONSTRAINTS	The data are intended for use by statisticians and ecological scientists interested in the spatial distribution of wet deposition over the eastern US. Collaboration with EPA in these studies is expected.

II. DATA QUALITY TAB

FIELD	FIELD CONTENT
* PROCESS DATE	February 18, 2009
* PROCESS DESCRIPTION	Through a collaborative process, EPA has developed software to fit the fused deposition surfaces.
PROCESS DATE	
PROCESS DESCRIPTION	
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PROCESS DESCRIPTION	
* LOGICAL CONSISTENCY REPORT	The predictive surfaces are based on using two sources of spatial information: NAPD/NTN wet deposition data and CMAQ numerical output. The CMAQ output is produced at EPA (http://www.epa.gov/asmdnerl/CMAQ).
* COMPLETENESS REPORT	Providing annual surfaces, aggregated from weekly predictive surfaces.

III. ENTITY AND ATTRIBUTES TAB

FIELD	FIELD CONTENT
* OVERVIEW	The predictive surfaces are intended for use by statisticians and ecologists in environmental assessments that require high resolution spatial information on wet deposition.

FIELD	FIELD CONTENT
* DETAILED CITATION	Input data The NADP/NTN weekly data were downloaded from the NADP wet site. The weekly CMAQ numerical output were created from version 4.6 of the model using CBIV mechanism. The space-time Bayesian fusion model combines the monitoring data and CMAQ output to predict wet sulfate and nitrate deposition. The model assumes that both the actual monitoring data and the CMAQ data provide good information about the same underlying pollutant surface, but with different measurement error structures.

IV. DISTRIBUTION TAB

FIELD	FIELD CONTENT
RESOURCE DESCRIPTION	Downloadable Data Files (.csv) containing Predictive Surfaces
DISCLAIMER/LIABILITY	Although these data have been processed successfully on a computer system at the Environmental Protection Agency, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data to evaluate data set limitations, restrictions or intended use. The U.S. Environmental Protection Agency shall not be held liable for improper or incorrect use of the data described and/or contained herein.
CUSTOM ORDER PROCESS	

V. METADATA TAB

FIELD	FIELD CONTENT
* DATE CREATED	Februaru 18, 2009
* STANDARD NAME	
* ACCESS CONSTRAINTS	Access for specific applications within use constraints
* USE CONSTRAINTS	The data are intended for use by statisticians in modeling efforts that require high resolution predictive spatial fields of air pollution.

VI. CONTACTS TAB

A. ORIGINATORS PAGE

FIELD	FIELD CONTENT
* PERSON	David Holland
* ORGANIZATION	US Environmental Protection Agency
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B. DISTRIBUTORS PAGE

FIELD	FIELD CONTENT
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